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Lifelong learning in the digital age: An analysis of online marketing communication strategies in slovak educational institutions

Celoživotné vzdelávanie v digitálnom veku: Analýza online marketingových komunikačných stratégií slovenských vzdelávacích inštitúcií

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Abstract

This paper explores the complex education process in modern society, emphasizing lifelong learning as critical for personal and professional development. Despite challenges such as market saturation with university graduates, lifelong learning—including professional and retraining courses—emerges as a solution for enhancing employability. However,

Abstrakt

Tento príspevok skúma komplexný vzdelávací proces v modernej spoločnosti, pričom zdôrazňuje, že celoživotné vzdelávanie je rozhodujúce pre osobný a profesionálny rozvoj. Napriek výzvam, ako je nasýtenie trhu absolventmi vysokých škôl, sa celoživotné vzdelávanie – vrátane odborných a rekvalifikačných kurzov – ukazuje ako riešenie na

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public awareness of its benefits remains limited, necessitating effective marketing communication to promote adult education. This paper analyses Slovak educational institutions' online platforms, mainly social media, for lifelong learning promotion. A mixed-method approach, incorporating institutional data and a survey of 633 Slovak participants, reveals a significant reliance on social media as an information source. Findings show that 81.67% of respondents obtain educational information online, with a strong preference for centralized profiles summarizing lifelong learning opportunities. Universities dominate as preferred providers, but untapped potential exists among secondary schools and language institutions. This study underscores the need for tailored digital marketing strategies in the educational sector, especially when targeting diverse demographic groups, including older adults. By leveraging social media and creating unified communication platforms, Slovak institutions can enhance lifelong learning engagement, addressing educational needs and societal demands.

Keywords: Lifelong Learning, Online Marketing Communication, Social Media Strategies, Adult Education, Slovak Educational Institutions.

zvýšenie zamestnateľ nosti. Verejné povedomie o jeho výhodách však zostáva limitované, čo si vyžaduje účinnú marketingovú komunikáciu na podporu vzdelávania dospelých. Tento príspevok analyzuje online platformy slovenských vzdelávacích inštitúcií, naimä sociálne siete, na podporu celoživotného vzdelávania. Prieskum medzi 633 respondentmi zo Slovenska odhaľuje značnú závislosť od sociálnych sietí ako zdroja informácií. Zo zistení vyplýva, že 81,67 % respondentov získava informácie o vzdelávaní online, pričom preferujú silne profily centralizované sumarizujúce možnosti celoživotného vzdelávania. Univerzity dominujú ako preferovaní poskytovatelia, ale nevyužitý potenciál existuje medzi strednými školami a jazykovými školami. Prípevok podčiarkuje potrebu prispôsobených stratégií digitálneho marketingu vo vzdelávacom sektore, najmä pri zacielení na rôzne demografické skupiny, vrátane starších ľudí. Využitím sociálnych sietí a vytvorením jednotných komunikačných platforiem môžu slovenské inštitúcie zvýšiť angažovanosť v oblasti celoživotného vzdelávania, riešiť vzdelávacie potreby a spoločenské požiadavky.

Kľúčové slová: Celoživotné vzdelávanie. Online marketingová komunikácia. Stratégie sociálnych médií. Vzdelávanie dospelých. Slovenské vzdelávacie inštitúcie.

Introduction

In an era of rapid technological advancements, shifting global dynamics, and ever-evolving industries, lifelong learning has become a cornerstone of personal and professional success. Unlike previous generations, where formal education often sufficed for a lifetime, today's society demands continuous adaptation and growth. Lifelong learning equips individuals with the skills to navigate these changes, fostering resilience and relevance in an increasingly competitive world. The modern workplace is a prime example of this necessity. Automation, artificial intelligence, and digital transformation are redefining job roles and creating new ones at an unprecedented pace. Lifelong learning enables individuals to upskill, reskill, and remain agile in their careers, ensuring they are not left behind. Beyond technical knowledge, it also cultivates critical thinking, creativity, and emotional intelligence.

Moreover, lifelong learning extends beyond professional realms. It enriches personal lives by promoting intellectual curiosity, broadening perspectives, and enhancing adaptability. As societies grapple with climate change, social inequality, and public health crises, informed and engaged citizens are crucial. Lifelong learning empowers individuals to contribute meaningfully to these collective efforts. In a world where the only constant is change, the ability to learn, unlearn, and relearn is a vital skill. Lifelong learning is not just a personal pursuit but a societal imperative. By embracing it, individuals can thrive in uncertainty, and societies can cultivate innovation, progress, and shared prosperity (Zrno et al., 2021).

In general, education, whether aimed at preschoolers, pupils, students, adults or even seniors, is a very complex process that can affect a person's development at all stages of their life. However, education also has its pitfalls. With the development of society, people's interest in education is gradually decreasing because the labour market is saturated with people with complete university education who have difficulty finding a job. This is the main demotivating factor that affects education. However, it is necessary to realize that education does not only concern higher education, but the importance of lifelong learning is increasingly coming to the fore, which, especially in the form of professional and retraining courses, can contribute to better application in the labour market and better preparation for many literacies (Cannistra et al., 2022). This fact is little known in society. Since education has always gone hand in hand with enlightenment, enlightenment in this area is essential. However, it is challenging to communicate information about education because traditional marketing communication tools may not be as successful

as in the case of communication about products. Therefore, it is necessary to find appropriate marketing communication tools to contribute to adult education awareness.

The concept of education has gradually become established in modern pedagogical theory, and it is a broader concept compared to the traditional idea of education. In addition to education, education also includes upbringing (Kobylarek et al., 2021). No other equivalent could express the connection between education and upbringing in the Slovak language. The connection between these two concepts is often used, e.g., in the form of educational-educational, which can seem artificial and impractical.

Today's job market is more competitive than ever, with rapid technological advancements and globalization intensifying the saturation. Employers are inundated with highly qualified candidates, making it increasingly difficult for professionals to stand out. Degrees and certifications that once guaranteed employment are now seen as entry-level requirements. This reality underscores the critical need for continuous professional development (Shahzad et al., 2023).

As industries evolve, so do the skills required to thrive in them. Technologies like artificial intelligence, automation, and big data are transforming roles, rendering some obsolete while creating demand for new expertise. Continuous professional development enables individuals to stay ahead of these shifts, ensuring they remain valuable assets to their organizations. Beyond technical skills, ongoing learning fosters adaptability, innovation, and problem-solving. In a saturated job market, the commitment to lifelong growth can be the distinguishing factor that propels individuals toward sustained career success (Konvit et al., 2023).

Motivations for lifelong learning include career advancement, personal development, and skill acquisition. Many learners view it as a way to stay competitive in the job market or pursue interests outside their professional domain. The flexibility of online courses and the accessibility of digital platforms also appeal to busy individuals. Barriers to participation include financial constraints, lack of time, and limited awareness of available opportunities. For older learners, digital literacy can be a significant obstacle. Institutions must address these barriers by offering affordable, flexible, and user-friendly learning options while investing in outreach to underserved populations (García-Toledano et al., 2023).

Education is, therefore, a more appropriate term than the combination mentioned above of education and training because it includes all existing formal and informal education and upbringing, from the preschool educational process to lifelong learning or third-age education (Spantekova & Smekalova, 2015).

Prucha (2009) points out that education can be considered a new term. On the other hand, classical terms include upbringing and education. However, according to him, all these terms form subsets of pedagogy as such. For illustration, he defined these terms as follows:

- Education is an activity that, in an educated society, ensures the transmission of socially accepted
 spiritual ideas from generation to generation, which includes both the mediation of behavioural norms,
 communication rituals, hygiene habits and socialization, which is aimed at the integration of the
 individual into society. Pedagogy understands education as a deliberate action on an individual's
 personality to achieve changes in various components of the personality.
- Education is a specific concept that does not overlap with the idea of upbringing because pedagogy understands it as a deliberate and coordinated acquisition of knowledge, skills and attitudes that an individual acquires through teaching at school.
- Education is an activity in which one individual tries to convey learning to another, i.e., both individuals meet in an educational reality in which educational processes occur. Education can also take place in ordinary life situations, but it is most often encountered in school, where the so-called school education takes place. In this case, the pedagogy theory also understands education as a process in which upbringing and education are combined. Compared to education, education itself has a longer-term course, is carried out by professional educators (e.g. teachers), and is based on a specific legislative definition.

For the correct and effective educational system to function, it is necessary not only to interrelate individual elements but also to respect and adhere to fundamental principles. First of all, it is required to comply with the principles of the system as such, which include integrity and organization, orientation on essential system elements, orientation on system relationships (external and internal) and orientation on basic



developmental laws of a set of elements. Subsequently, these general system principles must be expanded to include communication principles.

With overwhelming content competing for attention, many businesses and organizations struggle to connect with their target audiences. This disconnect often stems from insufficient or poorly executed online marketing strategies.

Effective online marketing is crucial to bridging this gap. It combines tools such as social media, search engine optimization, content marketing, and targeted advertisements to reach and engage audiences. A well-crafted strategy ensures that the right message reaches the right people at the right time, enhancing visibility and fostering trust (Shuppe et al., 2024).

Moreover, online marketing is cost-effective and measurable, allowing businesses to adapt quickly and refine campaigns based on performance metrics. In an era where visibility equals viability, prioritizing strategic online marketing is essential to combating the challenge of public unawareness and achieving sustained impact (Beno, Kriz & Caganova, 2023).

Communication, as such, is a standard part of life. On the other hand, it is included in the essential marketing mix, the elements of which are, in addition to, product, price, and place (distribution). Therefore, the historical development of marketing communication can be summarised as follows: advertising was the first form of marketing communication (Ishchenko et al., 2023). Promotion and advertising are terms that are often confused in the literature, but terminological inconsistency has caused these terms to be confused with the term marketing communication.

Theoretical Framework

Digital marketing has become a cornerstone for educational institutions aiming to attract, engage, and retain learners. Effective strategies include leveraging social media, optimizing websites for user experience, and utilizing search engine marketing and email campaigns. Institutions can create engaging content such as blogs, webinars, and video tutorials to demonstrate their expertise and build trust. Targeted advertisements on platforms like Google and Facebook allow institutions to reach specific demographics, such as younger adults or professionals seeking career advancement (OECD, 1999).

Social media platforms are particularly effective for real-time engagement. Institutions can foster community by creating interactive posts, polls, and live Q&A sessions while addressing prospective learners' questions and concerns. Collaborations with influencers in education or alumni testimonials can further enhance credibility. Moreover, analytics tools provide valuable insights into audience behavior, enabling institutions to tailor their strategies and measure success (UNESCO, 2023).

Therefore, Marketing communication is the equivalent of the fourth component of the marketing mix, promotion. This results from many years of practice and its integration into marketing theory, especially in the USA and Western Europe. Equating marketing communication to the term promotion would be outdated because promotion today only represents advertising, which is also extended to non-economic areas because promotion seeks to disseminate commercially beneficial information and ideas in general. Thus, not all regions have replaced the term promotion with promotion or marketing communication (Hornak, 2018).

Marketing communication evolved from the integral term marketing, with market meaning market and the ending expressing a particular activity. Marketing gained importance over time, especially in the 1990s, when it began to be taught at American universities in 1902. The first marketing book, Marketing, was published in the USA as early as 1905. Around 1920, marketing theory began to merge with practice, supporting new marketing works' emergence. 1932 was a turning point for marketing because the American Marketing Association (AMA) was founded in the USA. In Europe, marketing began to develop only after World War II. Because the term marketing was gradually adopted from English into other languages such as German, French, Russian, Hungarian and Polish, it gradually became established in Slovak as well, as an expression of an unavoidable reality, the main attribute of which is a market-oriented economy (Prachar, 1991).

In Slovakia, marketing communication began to develop more significantly after 1990, when Slovakia was part of Czechoslovakia and at that time the first independent university study of advertising in Czechoslovakia was established. Our economy changed from centrally planned to market, resulting in marketing communication becoming necessary. With the opening of the market, the importance of monopoly advertising and promotional agencies was lost, and space was created to emerge new ones, with their number climbing to several thousand. In addition to domestic advertising agencies, renowned advertising agencies from abroad also began to come to our territory, which were initially based in Prague but gradually moved to other cities in Czechoslovakia. Gradually, associations and associations that covered them were established with advertising agencies, first at the federative level, later divided into Czech and Slovak. After the division of Czechoslovakia, a turning point in the field of marketing communication education occurred in 1995, when the SOSPRA organization was established, associating marketing communication workers in Slovakia - SOSPRA closely cooperated with the then Department of Promotion of Comenius University in Bratislava (currently the Department of Marketing Communication), which was also established in 1995. In the Czech Republic, a turning point in the field of marketing communication education occurred in 1997, when an Institute was established at the Faculty of Technology of Tomas Bata University in Zlin, where two departments were created - the Department of Advertising Creation and the Department of Advertising Communication (Hornak, 2010). It follows from the above that adult education and marketing communication have standard features, of which the implementation of an informative function, including an educational and training function, can be highlighted. Upbringing and training are the main attributes of education. As part of the informative function, which is the main attribute of marketing communication, they act as areas in which education and marketing communication intersect.

The social aspects of marketing communication are related to its connection with sociology. As mentioned, marketing communication is a relatively young scientific discipline inspired and influenced by several established scientific disciplines during its development. Theoretical reflection has not been able to keep up with the dynamic development of marketing communication, which is mainly based on practice. Marketing communication, which is rich in theoretical concepts and practical opinions and approaches, has gradually established itself in the system of social sciences mainly due to its proximity to sociology and the fact that sociology is also concerned with collecting information from surveys and research. Such information also serves marketing communication experts, advertisers, and consumers. Marketing communication, like sociology, collects information about "the structure of the population, their needs, attitudes, purchasing habits, products that are the subject of sale, etc." (Hornak, 2010, p. 325).

Another social attribute of marketing communication is its significant theoretical basis connected with empiricism, which is based on reality, i.e., people's or projects' everyday lives (Vartiak, 2015). The social aspect of marketing communication, which it has in common with sociology, is empirical research based on everyday interpersonal communication, sociological research, psychological research, marketing research and media research. The theoretical foundations of marketing communication are thus regularly verified in social reality while also being guided by the standard expected behaviour of the recipient of the marketing communication message with regard to his social position.

As has also been mentioned, marketing communication is based on interaction, and it is interaction, or social interaction, which is another of its social attributes. Social interaction includes verbal and non-verbal communication, which form the basis of marketing communication and sociology. Symbols and symbolism represent another of the social attributes of marketing communication because colours, objects, numbers, figures, and nature can also be considered symbols, and the meaning of symbolism can be clearly seen in them. In marketing communication, it is essential to use and point out appropriate symbols, thanks to which the recipient knows that such communication is intended for him. Symbols mediate and interpret the desired communication of a fact to which people attribute a specific meaning (Nadanyiova et al., 2021). Symbolism can then increase the effectiveness of the perception of social reality, which implies that the individual social attributes of marketing communication are interconnected. The last significant social attribute of marketing communication is the ability to communicate with the market, which is essentially made up of people, and people also make up society.

Marketing communication includes communication with the entire market (group communication) or communication with a specific market entity (interpersonal communication), aiming first to satisfy an individual need and only then the needs of society. However, from the marketing communication perspective, satisfying needs is understood from the standpoint of quality and economy. Communication with the market can also take place in issues of societal importance, such as so-called social campaigns,



such as a campaign to limit smoking, a campaign to fight drugs, or a campaign for health care (Hornak, 2010). However, it is also vital for individual business entities that are trying to excel their position in the market (Jankalova & Vartiak, 2017). However, ethics and a social approach are significant elements also applied in education. Therefore, it can be said that these are other intersecting areas of education and marketing communication.

The content of marketing communication should consist of solid arguments because weak ones will be insufficient for the target group. However, the content side goes hand in hand with the formal side because it is the latter that can best influence the rationality and emotionality of the target group. The rational side of marketing communication is built on the facts that the communication contains. The facts are direct and effective, especially for a target group considering a purchase and most of all in the case of purchasing a long-term product (Garbarova, Bachanova & Vartiak, 2017). On the contrary, the emotional side is crucial if it is not about buying products but, for example, about contributing to non-profit and charitable purposes or if the goal is to influence the social side of a person. However, suppose the effectiveness of marketing communication is not sufficient. In that case, one option is to involve an expert whom people will trust (for example, involving a famous chef in a marketing campaign for selling food). In addition to experts, people also trust celebrities (so-called celebrity endorsements), whether they are actors, singers, TV presenters, or editors. Thanks to these marketing moves, the brand will strengthen its credibility and quality (Karlicek et al., 2016).

The mass communication model uses all available information about the target group thanks to the media used, and communication can occur in such a way that information is directed from one sender to several recipients or from several senders to several recipients. The marketing message is then spread through the media, and the main reason for using this model is the effort to reach the broadest possible target group or as many target groups as possible. In this case, it is challenging to obtain immediate feedback because it is more or less one-sided communication. Such marketing communication can take place at the regional or national level. The mass communication model differs from the virtual communication model, especially in the possibility of obtaining feedback, because virtual communication takes place mainly via the Internet, where various tools for collecting and analyzing feedback data can be implemented (Wiktor, 2013).

The main venue for virtual communication is the World Wide Web system, which we know for short as www. Virtual communication is the most widely used marketing communication model when several marketers are interested in reaching several recipients simultaneously. All this is possible, especially with the development of the Internet into its current form, Web 2.0, which allows for the erasing of boundaries even faster than the original www protocol. The specific feature of marketing communication in virtual communication is the broadcasting of a multimedia message, which has a dynamic audio-visual form and is often interactive. This form of marketing communication can reach mainly the so-called classic target group (mainstream), which is most susceptible to receiving multimedia content (Wiktor, 2013). Interpersonal, mass, and virtual communication also have their place in education and can take place in all these ways. Therefore, in addition to the informational, ethical, and social areas, education and marketing communication also meet and support each other in communication and the choice of communication models (Jaseckova, Konvit & Vartiak, 2023). Just as marketing communication is moving entirely into the virtual realm (online space), education is increasingly taking place online due to the development of information and communication technologies (e.g. e-learning).

Social media has revolutionized how educational institutions communicate with learners. Platforms like Facebook, Instagram, LinkedIn, and TikTok allow institutions to reach diverse audiences through engaging content. Social media can be a platform for sharing updates, promoting courses, and providing accessible learning resources. In education, social media facilitates collaboration and discussion through groups and forums. It enables peer-to-peer learning and fosters interaction between students and educators. Institutions can also create dedicated profiles to share lifelong learning opportunities, making it easier for users to access information in one place. Social media can make learning more interactive and enjoyable by integrating gamification elements, such as quizzes or challenges (Tkacová et al., 2022).

Methodology

The paper's main objective is to analyze the attitudes of participants and prospective lifelong learning participants towards online marketing communication of educational institutions.

The paper's main objective was determined based on the results of a pre-test conducted on a sample of 128 respondents aged 18 to 62, where they were asked about their potential interest in completing lifelong learning and the appropriate form of marketing communication from an institution providing lifelong learning. Of the respondents interviewed, only 16.41% stated that they had already completed a course or training within lifelong learning in the past. When asked whether they planned to complete a course or training within lifelong learning in the future, as many as 55.47% of respondents responded positively. Of the institutions providing lifelong learning, respondents are mainly familiar with universities (87.50%), further education institutions (32.81%), secondary schools (23.44%) and finally language schools (17.19%). The respondents did not use the option of adding another institution providing lifelong learning. Most respondents learned about institutions providing lifelong learning on the Internet (58.59%), on the radio (14.06%), at the Labour Office (13.28%) and in the press (4.69%).

In contrast, none of the respondents marked the option "television". Seventy-five respondents who marked the option "internet" in this question had the opportunity to continue with an additional question, the aim of which was to find out what the most suitable source of information about lifelong learning on the Internet is for them. As many as 81.33% of respondents stated that the most suitable source of information about lifelong learning on the Internet for them is the profiles of educational institutions on social networks, and 16% of respondents opted for the websites of academic institutions. Only 2.67% of respondents marked the Ministry of Education, Science, Research and Sport website of the Slovak Republic. Based on the pre-test results, we concluded that the most suitable form of marketing communication on the Internet in lifelong learning is social networks, or rather, profiles of educational institutions on social networks.

The paper employed a mixed-method approach, integrating data collection from educational institutions in Slovakia and a comprehensive survey among prospective lifelong learners. The objective was to analyze the attitudes toward online marketing communication by educational institutions, focusing on lifelong learning opportunities:

- Data collection from educational institutions: An exhaustive analysis of Slovak colleges and universities was conducted. Information was gathered on 35 institutions comprising 20 public universities, three state universities, and 12 private universities, representing 115 faculties. The study identified the lifelong learning programs offered by these institutions, such as vocational courses, University of the Third Age programs, language courses, professional education (e.g., MBA, MSc, LL.M, DBA), and teacher education. Additionally, the presence of these institutions on social media platforms was evaluated. Of the 26 institutions actively providing lifelong learning, 23 maintained social media profiles, primarily on Facebook, while others extended their presence to platforms like YouTube, Instagram, Twitter, LinkedIn, and Vimeo.
- Survey design and implementation: A quantitative survey was conducted to explore the perceptions and attitudes of individuals regarding lifelong learning and online marketing communication by educational institutions. The survey was distributed via Facebook, targeting users who interacted with the social media profiles of educational institutions. Anonymity was ensured, and 633 valid responses were collected from the original sample of 826 people contacted. The demographic composition of the respondents included 48.34% men and 51.66% women. Age groups ranged from 18–62 years, with the highest representation (49.29%) in the 18–30 age category and no respondents over 62 years. The survey consisted of eight questions designed to capture respondents' prior participation in lifelong learning, future interests, preferred institutions, sources of information, and attitudes toward social media's role in lifelong learning marketing.
- The choice of Facebook as several factors drove the primary survey distribution platform. Firstly, Facebook is widely used in Slovakia, making it an accessible medium to reach a diverse audience. Among Slovakia's institutions providing lifelong learning, 23 of 26 actively maintain profiles on Facebook, indicating its dominance as a marketing and communication tool. This aligns with pre-test findings, where 81.33% of respondents identified educational institutions' social media profiles as their preferred source of information. Facebook's robust targeting tools and engagement features allowed researchers to reach users interacting with institutional profiles, ensuring relevance to the study's objectives.
 - Facebook offers several advantages, including access to a broad demographic that encompasses key age groups targeted in this study, the ability to target users based on their likes, comments, and interactions to ensure a relevant and engaged sample for educational content, and cost-



- effectiveness, as it provides a more economical solution for large-scale data collection compared to traditional survey distribution methods.
- The study faced several disadvantages, including the exclusion of individuals not active on Facebook, which introduced selection bias, and the potential limitation of findings due to platform-specific behavior, as respondents' preferences and actions might primarily reflect Facebook usage patterns rather than broader trends. Additionally, reliance on user interaction metrics confined the study to active participants engaging with educational profiles, potentially overlooking the insights of passive observers.
- Data analysis: The survey responses were analyzed quantitatively to identify trends and preferences. Respondents were divided into groups based on their experience with lifelong learning: 36.49% had previously participated, while 63.51% had not. For those interested in future participation, universities were the preferred institutions (69.06%), followed by further education institutions, secondary schools, and language schools. The survey also assessed the effectiveness of various information sources, revealing that 81.67% of respondents relied on the Internet, while traditional media like radio and television played a negligible role. Further analysis focused on the role of social media profiles as sources of information. A majority (67.46%) found institutional profiles clear and valuable. Additionally, a significant number of respondents (74.41%) supported the idea of a centralized social media profile summarising lifelong learning opportunities in Slovakia, and 65.40% expressed interest in following such a profile.
- Limitations: The reliance on Facebook excludes individuals who do not use the platform, particularly older adults, as no respondents over 62 participated, potentially skewing findings toward younger, digitally active demographics. The insights heavily depend on Facebook-specific dynamics, limiting their applicability to broader social media or offline preferences. The results also reflect attitudes specific to Slovakia, making them less generalizable to other geographical or cultural contexts. Furthermore, as with all surveys, self-reported data introduces the risk of response bias, where participants may provide socially desirable answers.

Results and Discussion

Currently, 35 colleges and universities in Slovakia provide education to 115 faculties. There are twenty public colleges and universities, including the Academy of Arts in Banská Bystrica, the University of Economics in Bratislava, the Catholic University in Ružomberok, the University of Prešov in Prešov, the Slovak University of Agriculture in Nitra, the Slovak University of Technology in Bratislava, the Technical University in Košice, the Technical University in Zvolen, the Alexander Dubček University of Trenčín in Trenčín, the University of Trnava in Trnava, J. Selye University, Comenius University in Bratislava, Constantine the Philosopher University in Nitra, Matej Bel University in Banská Bystrica, Pavol Jozef Šafárik University in Košice, the University of St. Cyril and Methodius University in Trnava, University of Veterinary Medicine and Pharmacy in Košice, University of Performing Arts in Bratislava, University of Fine Arts in Bratislava, University of Žilina in Žilina. There are three state universities, namely the Academy of the Armed Forces of General Milan Rastislav Štefánik in Liptovský Mikuláš, the Academy of the Police Force in Bratislava, and the Slovak University of Health Sciences in Bratislava. Public and state universities are complemented by private universities, such as the Media Academy - a professional university of media and marketing communication in Bratislava, the Bratislava International School of Liberal Studies, the Ján Albrecht Academy of Music and Arts in Banská Štiavnica, the Pan-European University, the University of Security Management in Košice, the Danubius University, the DTI University, the University of Economics and Public Administration Management in Bratislava, the University of Management in Trenčín, the University of International Business ISM Slovakia in Prešov, the University of Health and Social Work of St. Elizabeth in Bratislava. These universities can be classified as institutions providing education for adults because university students, whether full-time or part-time, have reached the age of 18 and are thus preparing for work or studying alongside their employment.

Most colleges and universities provide lifelong learning through professional courses, with as many as 17 colleges and universities. Sixteen also provide lifelong learning through the University of the Third Age. 12 colleges and universities provide language courses, and 12 also provide Supplementary Pedagogical Studies. Professional education (e.g., MBA, MSc, LL.M, DBA) is provided by nine colleges and universities, and six offer courses aimed at teacher education.

Therefore, vocational courses are the most frequently provided lifelong learning at Slovak universities and colleges. Vocational courses are attended mainly by employed people interested in improving their qualifications. Still, they can also be attended by unemployed people interested in finding a job thanks to their new qualifications.

The University of the Third Age is the second most frequently provided lifelong learning by Slovak universities and colleges, and this education is primarily provided to people of retirement age.

Supplementary pedagogical studies and language courses are specific lifelong learning because only certain groups of people are interested in them. Supplementary pedagogical studies primarily interest people who plan to teach in primary, secondary, kindergartens or clubs providing extracurricular activities. On the other hand, language courses are attended mainly by employed adults who need to improve their language level for work purposes or people who want to learn a language in their free time.

An important place in lifelong learning is also occupied by vocational education, the result of which is the award of a professional (non-academic) degree. The most common are the MBA (Master of Business Administration), MSc (Master of Science), LL.M (Master of Laws, or Legum Magister) and DBA (Doctor of Business Administration). Such vocational education represents added value, especially for employed people interested in obtaining new information in their field of activity, which is presented to them by university teachers and recognized experts from practice. This type of education is becoming increasingly popular in Slovakia because university studies are often considered only on a theoretical basis. Still, vocational education provides mainly a practical perspective on the issue.

Teacher education, divided into updating, innovation and qualification, represents an essential source of information for teachers. Its popularity among teachers is high, mainly because, thanks to completing such education, teachers can increase their income through additional payments. It is, therefore, the most specific form of lifelong learning because such education must be accredited by the Ministry of Education, Science, Research and Sports of the Slovak Republic, but only teachers can participate in it.

Regarding the presence of universities and universities on social networks, we found that out of 26 universities and universities providing lifelong learning in Slovakia, 23 of them have a profile on social networks. At the same time, only three of them have created an individual profile for the centre or department providing lifelong learning (Institute of Lifelong Learning of the Slovak University of Technology in Bratislava, Center for Further Education of Comenius University in Bratislava and Institute of Lifelong Learning of the University of Žilina in Žilina) and one of them has created a profile for the faculty covering lifelong learning (Faculty of Education of the Catholic University in Ružomberok). Two universities do not even have a profile on any social network (Slovak University of Health Sciences in Bratislava, University of Economics and Management in Bratislava).

All 23 universities that have a profile on social networks have a profile on Facebook. In addition, 10 of them also have a profile on YouTube, 7 on Instagram, 3 on Twitter, 1 on LinkedIn and 1 on Vimeo.

Of the 826 people originally addressed, 633 respondents from all over Slovakia participated in the survey, while the questionnaire was anonymous and was distributed via the social network Facebook. Fans of individual profiles of colleges and universities included in the methodology were addressed. Since the list of fans is not publicly available, only those fans who liked or commented on posts published on individual profiles were addressed. Of the total 633 respondents, 306 were men, representing 48.34%, and 327 were women, representing 51.66%. The age categories of respondents were as follows:

- 18-30 years: 312 respondents (49.29%),
- 31-40 years: 118 respondents (18.64%),
- 41-50 years: 112 respondents (17.69%),
- 51-62 years: 91 respondents (14.38%),
- over 62 years: o respondents (0.00%).

The identification part was followed by a survey that focused on marketing communication in adult education, emphasizing lifelong learning and the Internet environment. The survey consisted of eight questions.



The first question, worded "Have you already completed a course or training within lifelong learning?" divided the respondents into two groups according to their answers, with the first group of 231 respondents (36.49%) having already completed a course or training within lifelong learning in the past. The second group of 402 respondents (63.51%) had not completed such a course or training yet. The second group (402 respondents) was moved to question number three.

The first group (231 respondents), therefore, continued with question number two, which read, "Which institution providing lifelong learning did you use?" the answers were as follows:

- University: 169 respondents (73.16%),
- High school: 22 respondents (9.52%),
- Language school: 9 respondents (3.89%),
- Further education institution: 29 respondents (12.55%),
- Other: 2 respondents (0.87%).

It follows from the above that a minor part of the respondents had already completed a course or training within lifelong learning, with most of them having completed such education at a university and the least at a language school. Two respondents marked the option "other".

Question number three, which was "Are you interested in completing a course or training within lifelong learning in the future?" was therefore continued by all respondents because we assume that both those who have already completed a course or training within lifelong learning and those who have not yet completed such education may be interested in completing it or further such education in the future. However, this question again divided the respondents into two groups, the second of which consisted of 187 respondents (29.54%) who are not interested in completing a course or training within lifelong learning in the future, and these respondents continued with question number five.

The first group, with 446 respondents (70.46%), answered this question in the affirmative. It therefore continued with question number four with the wording "Which institution providing lifelong learning do you plan to use?" the results of which were as follows:

- University: 308 respondents (69.06%),
- Secondary school: 39 respondents (8.74%),
- Language school: 12 respondents (2.69%),
- Further education institution: 76 respondents (17.04%),
- Other: 11 respondents (2.47%).

Based on the above, it can be summarised that most respondents are interested in taking a course or training within lifelong learning in the future, mainly at a university and the least at a language school. Eleven respondents marked the option "other".

All respondents answered the fifth question, "Where did you learn about institutions providing lifelong learning?" because we assume that knowledge about lifelong learning is part of the general overview of every adult. Still, respondents could also indicate the option "I have not heard of lifelong learning yet" as one of the answers. Information about lifelong learning and the institutions that provide it can be obtained from various sources, and this was precisely the aim of this question. The respondents expressed themselves as follows:

- Labour Office: 72 respondents (11.37%),
- Periodical press: 38 respondents (6.00%),
- Radio: 6 respondents (0.95%),
- Television: 0 respondents (0.00%),
- Internet: 517 respondents (81.67%),
- I have not heard of lifelong learning: 0 respondents (0.00%).

The results showed that most respondents learned about lifelong learning institutions via the Internet. The least of them knew about lifelong learning institutions from the radio, and none marked the option "television". It is positive that our assumption that all respondents had, or have, information about lifelong

learning institutions was confirmed because none of them marked the option "I have not heard of lifelong learning yet".

The sixth question, "Is the profile of an educational institution on a social network a clear source of information about lifelong learning for you?" is one of the questions that focus on marketing communication via social networks by institutions providing lifelong learning, with the respondents answering this question as follows:

- Rather yes: 69 respondents (10.90%),
- Definitely yes: 427 respondents (67.46%),
- Rather no: 84 respondents (13.27%),
- Definitely no: 53 respondents (8.37%).

It follows from the above that the majority of respondents answered positively (496 respondents), and therefore, consider the profile of an educational institution on a social network to be a clear source of information about lifelong learning, with these respondents divided into a smaller group that marked the option "rather yes" and a dominant group that marked the option "definitely yes". On the contrary, only 137 respondents expressed their opinion negatively, with a smaller proportion of these respondents indicating the option "definitely not" and a slightly more significant proportion indicating the option "rather not". These results only confirmed our assumption that social networks are a good source of information about adult educational opportunities.

All respondents continued with the seventh question, which was "Would you like it if there was a social network profile that would summarise information about lifelong learning from all over Slovakia?" within which the following answers were recorded:

- Rather yes: 63 respondents (9.95%),
- Definitely yes: 471 respondents (74.41%),
- Rather no: 76 respondents (12.01%),
- No: 23 respondents (3.36%).

The results once again confirmed the importance of social networks in the field of marketing communication in adult education, as a significant majority of respondents (534 respondents) expressed their opinion positively, with a minor part of them indicating the option "rather yes" and a large majority indicating the option "definitely yes". On the other hand, only 99 respondents expressed a negative opinion on this question, with a minor part indicating the option "definitely not" and a more prominent part indicating the option "rather not". We evaluated these results very positively because the survey showed that a social network profile that would summarise information about lifelong learning from all over Slovakia is a solution that could make such education more attractive within Slovakia, especially for people using social networks.

The eighth question, "Would you become a fan of such a profile on a social network that would summarise information on lifelong learning from all over Slovakia?" served to determine whether the respondents' interest in a profile on a social network that would summarise information on lifelong learning from all over Slovakia would be reflected in them becoming its fan, with the answers being as follows:

- Rather yes: 148 respondents (23.38%),
- Definitely yes: 414 respondents (65.40%),
- Rather no: 52 respondents (8.21%),
- Definitely no: 19 respondents (3.00%).

We again evaluate the results of the answers positively because an even more significant proportion than in the previous question expressed themselves positively, namely 562 respondents, of whom a smaller proportion marked the option "rather yes" and a more significant proportion marked the option "definitely yes". Only 71 respondents expressed themselves negatively in this question, with fewer marking the option "definitely no" and more marking the option "rather no".



To discuss the results, the survey, conducted among 633 respondents from Slovakia via Facebook, reveals significant insights into attitudes toward lifelong learning and the role of social media. Of the participants, 48.34% were men, and 51.66% were women, with nearly half (49.29%) aged 18–30, indicating higher engagement among younger demographics. No respondents were over 62, highlighting a gap in outreach to older individuals. Only 36.49% had previously participated in lifelong learning, with universities being the dominant providers (73.16%), while language schools had the least representation (3.89%).

Future interest in lifelong learning was high, with 70.46% expressing a desire to enrol, primarily favouring universities (69.06%). Respondents overwhelmingly cited the Internet (81.67%) as their primary source of information about lifelong learning opportunities, with negligible reliance on traditional media such as radio (0.95%) and television (0.00%). This highlights the dominance of digital platforms in disseminating information.

The majority (67.46%) found social media profiles of educational institutions to be transparent sources of information, with 496 respondents responding positively to their usefulness. This demonstrates the importance of social networks in marketing educational opportunities. When asked about the potential for a centralized social media profile summarising lifelong learning opportunities in Slovakia, 74.41% responded positively, signalling the demand for such a solution.

The idea of becoming a fan of such a profile also resonated, with 65.40% of respondents expressing strong interest. These findings suggest that a centralized, accessible digital platform could significantly enhance engagement in lifelong learning. The survey reflects an untapped market, particularly among those who have not yet participated in lifelong learning (63.51%), and underscores the need for institutions to prioritize digital marketing strategies.

Universities are well-positioned to lead lifelong learning initiatives, given their popularity among respondents. However, there is potential for growth among secondary schools and further education institutions. The findings also underscore the critical role of social media, as most respondents actively engage with educational profiles and favour the creation of a centralized hub.

This survey provides actionable insights for improving the reach and attractiveness of lifelong learning. Institutions should enhance their social media presence, target younger audiences, and develop centralized resources. Additionally, efforts should be made to engage older adults, who are currently underrepresented. The results indicate that digital tools and platforms are crucial to fostering more significant participation in lifelong learning in Slovakia.

A notable strength of the survey is its balanced demographic representation across genders and the high participation of younger adults (18–30 years). However, the absence of respondents over 62 underscores a critical gap. Older adults represent an underserved demographic, and targeted outreach programs could address this disparity. Institutions might consider courses tailored to their needs, such as digital literacy or community-based learning programs.

The dominance of universities as the preferred providers (73.16% of past participants and 69.06% of future aspirants) highlights their pivotal role in lifelong learning. However, the low engagement with language and secondary schools suggests untapped potential. These institutions could benefit from offering niche programs or partnerships with other providers to diversify their appeal.

The reliance on the Internet (81.67%) and social media (67.46%) as primary information sources underscores the importance of digital marketing. The demand for a centralized social media profile (74.41% support) further emphasizes the need for accessible, cohesive information platforms. This allows institutions to collaborate and create a unified hub aggregating lifelong learning opportunities, enhancing user accessibility.

While the survey results are promising, they also indicate the need for outreach and program design innovation. Institutions should harness digital tools to engage broader demographics and explore new delivery methods to attract learners from all backgrounds. By addressing these challenges, Slovakia can cultivate a more inclusive and robust culture of lifelong learning.

Conclusions

The paper's main objective was to analyze the attitudes of participants and prospective lifelong learning participants towards online marketing communication of educational institutions.

The analysis of participants' and prospective lifelong learners' attitudes toward the online marketing communication of educational institutions in Slovakia reveals several critical insights aligned with the study's objective. Slovak universities and other educational institutions offering lifelong learning opportunities have a strong foundation but must address significant potential for enhancing their outreach and engagement strategies. The Internet and social media have emerged as the most influential channels for disseminating information about lifelong learning, with 81.67% of respondents citing the Internet as their primary source of information and 67.46% positively evaluating the social media profiles of educational institutions. This demonstrates that online marketing is crucial for effectively reaching and engaging adult learners.

The survey also highlights a strong preference for centralized information, with 74.41% of respondents expressing interest in a unified social media profile summarising lifelong learning opportunities. Such a platform would simplify exploring educational options and increase the visibility of institutions across Slovakia. Universities remain the dominant choice for lifelong learning among respondents, reflecting trust in their credibility. At the same time, secondary schools and further education institutions need to innovate and enhance their marketing efforts to attract more participants. Furthermore, younger adults, mainly those aged 18–30, show higher participation rates, whereas older adults are significantly underrepresented, indicating a gap in outreach and tailored programs for senior learners who could benefit from initiatives like the University of the Third Age.

The findings also underline the importance of tailoring marketing strategies to meet the needs of specific demographic groups. Lifelong learning offerings, such as vocational courses, language classes, and professional qualifications like MBA, MSc, LL.M, and DBA, cater to distinct audiences, allowing institutions to design targeted marketing efforts. The growing interest in professional and practical education among working adults highlights the importance of addressing this demand. Social media remains a strategic tool, with respondents showing strong interest in engaging with a centralized profile for lifelong learning opportunities, demonstrating its potential to enhance accessibility and awareness significantly.

The paper emphasizes the critical need for a centralized digital hub dedicated to lifelong learning, which would serve as a comprehensive resource for learners of all ages. Such a hub could provide a one-stop platform offering access to courses, certifications, career guidance, and community forums, making it easier for individuals to navigate and engage with educational opportunities. Additionally, robust and engaging social media content is pivotal in attracting and retaining learners. By utilizing creative storytelling, video tutorials, success stories, and interactive sessions, educational institutions can build stronger connections with their audiences, especially younger generations who rely heavily on digital platforms.

Furthermore, the paper highlights the importance of tailored campaigns targeting underrepresented demographics, particularly senior learners. Customized messaging and accessible content can help address their unique learning needs and inspire their participation in lifelong education. Similarly, institutions less represented in lifelong learning initiatives, such as secondary schools and language centers, have a vital role to play. By enhancing their outreach and creating specialized programs, these institutions can broaden their impact and ensure that diverse educational needs are met.

By leveraging these insights and focusing on digital platforms, Slovak educational institutions have a unique opportunity to expand their reach and foster greater participation. Such efforts will improve individual outcomes and contribute to a more inclusive and forward-thinking culture of lifelong learning in Slovakia. With intentional strategies and digital innovation, lifelong learning can become a cornerstone of societal progress, benefiting individuals and communities.

A potential future research direction to complement this paper is a qualitative study exploring participants' lived experiences with lifelong learning initiatives facilitated through digital platforms. This study would aim to understand how learners engage with a centralized digital hub and related resources, the challenges they encounter, and the impact of such platforms on their personal and professional growth. It would focus



on examining learners' perceptions and use of a digital hub, the role of social media and online forums in fostering engagement and community, and the experiences of underrepresented groups, such as senior learners and participants from institutions like language centers and secondary schools. Data would be collected through semi-structured interviews, focus groups, and participant diaries, with thematic analysis to identify key themes related to accessibility, engagement, and outcomes. Findings could offer valuable insights into the effectiveness of digital hubs, highlight gaps in current strategies, and provide actionable recommendations for improving inclusivity and user experience. By informing policymakers and educators, this research would help refine lifelong learning initiatives and contribute to a more inclusive and adaptive educational culture.

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